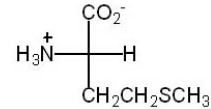


i-Clicker Questions

Question 1

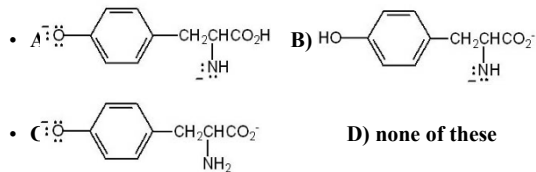
- **What is the absolute configuration (R or S) of L-Methionine?**

- **A) R**
- **B) S**



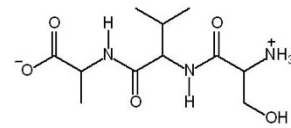
Question 2

- Above pH 10 the major species in a solution of tyrosine has a net charge of -2. What is the structure of this species?



Question 3

- Specify the correct sequence for this tripeptide starting with the N terminus.



- A) Ala-Val-Ser B) Ser-Val-Ala
- C) Gly-Leu-Thr D) Thr-Ile-Ala

Question 4

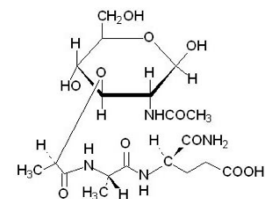
Proteins are made when amino acids form peptide bonds to link together. Which of the following contains the correct number and type of atoms that are necessary to define a peptide bond?

- A. One carbon, two oxygen, one nitrogen
B. Two carbons, one oxygen, one nitrogen, one hydrogen
C. One carbon, two oxygen, one nitrogen, two hydrogen
D. One carbon, one oxygen, one nitrogen, one hydrogen

Question 5

- **How many peptide bonds are present in the molecule below?**

- **A) 1**
- **B) 2**
- **C) 3**
- **D) 4**



Question 6

- Serine has a $pK_{a1} = 2.21$ and a $pK_{a2} = 9.15$. What is the isoelectric point of serine?
- A) 5.60
- B) 5.65
- C) 5.68
- D) 6.02

Question 7

- An octapeptide subjected to degradation produced, after purification, the fragments
- Ala-Phe, Leu-Gly, Val-Tyr, Phe-Gly-Val, Tyr-Arg-Leu. What is the sequence of the peptide?
- A) Gly-Leu-Arg-Tyr-Val-Gly-Phe-Ala
- B) Ala-Phe-Phe-Gly-Val-Tyr-Arg-Leu
- C) Ala-Phe-Gly-Leu-Gly-Val-Tyr-Arg
- D) Ala-Phe-Gly-Val-Tyr-Arg-Leu-Gly

Question 8

- A tripeptide contains alanine, valine, and serine. How many sequences are possible?
- A) 3
- B) 4
- C) 5
- D) 6